

**MINTZ LEVIN  
COHN FERRIS  
GLOVSKY AND  
POPEO PC**

*Reston  
Boston  
New York  
Washington  
New Haven*

*12010 Sunset Hills Road  
Suite 900  
Reston, Virginia 20190  
703 464 4800  
703 464 4895 fax  
www.mintz.com*

#40

B.D.

(-29-04)

## Fax Cover Sheet

**RECEIVED  
CENTRAL FAX CENTER**

**JAN 09 2004**

**DATE:** January 9, 2004

**FROM:** James G. Gatto

**CLIENT:** Electro Products, Inc.

**Unofficial**

*Direct Dial 703 464 8182  
[jgatto@mintz.com](mailto:jgatto@mintz.com)*

Attorney No.

2654

Client No.

23435

Matter No.

004

**To:**

NAME	COMPANY	BUSINESS #	FAX #
<b>Daniel Swerdlow</b>	<b>U.S. Patent &amp; Trademark Office</b>	<b>703-305-4088</b>	<b>703-872-9306</b>

**MESSAGE:**

RE: U.S. Patent Application Serial No. 08/749,766

Please see the attached DRAFT claims.

RES 83833v1

**We are sending a total of 13 pages, including this cover sheet.**

**Please call us at 703.464.4800, if you experience any problems.**

STATEMENT OF CONFIDENTIALITY  
THE INFORMATION CONTAINED IN THIS FAX IS INTENDED FOR THE EXCLUSIVE USE OF THE ADDRESSEE AND MAY CONTAIN CONFIDENTIAL OR PRIVILEGED INFORMATION. IF YOU ARE NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY FORM OR DISSEMINATION OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF THIS FAX WAS SENT IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY PHONE.

**DRAFT****APPENDIX****CLAIMS**

1. A sound system for capturing and reproducing sounds produced by a plurality of sound sources, comprising:
  - means for separately receiving sounds produced by the plurality of sound sources;
  - means for converting the separately received sounds to a plurality of separate audio signals without mixing the audio signals;
  - means for separately storing the plurality of separate audio signals without mixing the audio signals;
  - means for separately retrieving over separate signal paths the stored audio signals;
  - an amplification network comprising a plurality of amplifier means under common control, with separate amplifier means in the individual signal paths for separately amplifying each of the separate audio signals, each of the amplifier means comprising one or more amplifier elements;
  - a loudspeaker network comprising a plurality of loudspeaker means, with separate loudspeaker means in the individual signal paths for reproducing the separately amplified audio signals; and
  - a dynamic control means for individually controlling each of the amplifier means to enable automatic simultaneous control over the amplifier means.
2. The sound system of claim 1, wherein the sound sources produce sounds having different sonic characteristics and each of said loudspeaker means is

**DRAFT**

customized according to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path.

3. The sound system of claim 2 wherein the at least one sonic characteristic comprises the frequency range of the sounds produced by the corresponding sound source.

The sound system of claim 2 wherein the at least one sonic characteristic comprises the directivity pattern of the sounds produced by the corresponding sound source.

4. The sound system of claim 2 wherein the at least one sonic characteristic comprises the frequency range and the directivity pattern of the sounds produced by the corresponding sound source.
6. The sound system of claim 2, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements, and customization of the at least one loudspeaker means includes selecting loudspeaker elements based on frequency characteristics of the sounds to be reproduced by that loudspeaker means
7. The sound system of claim 2, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements, and customization of the at least one loudspeaker means includes arranging loudspeaker elements based on directivity pattern characteristics of the sounds to be reproduced by that loudspeaker means
8. The sound system of claim 2, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements, and customization of the at

**DRAFT**

least one loudspeaker means includes selecting loudspeaker elements based on frequency characteristics of the sounds to be reproduced by that loudspeaker means and arranging loudspeaker elements based on directivity pattern characteristics of the sounds to be reproduced by that loudspeaker means.

9. The sound system of claim 1, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements and the loudspeaker elements are controlled by the dynamic controller.
10. The sound system of claim 1 further comprising means for selectively enabling a user to elect to intentionally group together audio signals from two or more sound sources for playback over a common signal path.
11. The sound system of claim 1 wherein two or more sound sources may be separately stored but intentionally played back over a common signal path.
12. The sound system of claim 1 wherein the sound sources produce sounds having sonic characteristics and wherein two or more sound sources having similar characteristics may be separately received, converted and stored but intentionally mixed together during playback and passed through a common loudspeaker means.
13. The sound system of claim 1 wherein the sound sources produce sounds having different sonic characteristics and at least one of said amplification means is customized according to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path.

**DRAFT**

14. The sound system of claim 1 wherein the sound sources produce sounds have different sonic characteristics and each of said amplification means is customized according to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path..
15. The sound system of claim 1 wherein each of the amplification means and loudspeaker means are under common control of the dynamic controller.
16. The sound system of claim 1, wherein at least one of the amplifier means comprises more than one amplifier element in a signal path.
17. The sound system of claim 16 wherein the more than one amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means.
18. The sound system of claim 16 wherein the amplifier elements are separately controllable by the dynamic controller.
19. The sound system of claim 1, wherein at least one of the amplifier means, comprises more than one group of amplifier elements.
20. The sound system of claim 19 wherein the groups of amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means.
21. The sound system of claim 19 wherein the groups of amplifier elements are separately controllable by the dynamic controller.
22. The sound system of claim 1, wherein at least one of the amplifier means comprises more than one amplifier element in a signal path, wherein the more than one amplifier elements are customized based on characteristics of the

**DRAFT**

- audio signals to be amplified by the at least one amplifier means and the amplifier elements are separately controllable by the dynamic controller.
23. The sound system of claim 1, wherein at least one of the amplifier means, comprises more than one group of amplifier elements, the groups of amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means and the groups of amplifier elements are separately controllable by the dynamic controller.
24. The sound system of claim 1, wherein at least one of the amplifier means comprises more than one amplifier element and the dynamic controller controls the amplifier means by selectively turning on or off individual amplifier elements.
25. The sound system of claim 1, wherein at least one of the amplifier means comprises more than one group of amplifier element and the dynamic controller controls the amplifier means by selectively turning on or off individual groups of amplifier elements or individual amplifiers within a group.
26. The sound system of claim 1, wherein at least one of the amplifier means comprises more than one amplifier element in a signal path, wherein the more than one amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means and the amplifier elements are separately controllable by the dynamic controller and wherein the sound sources produce sounds having different sonic characteristics and each of said loudspeaker means is customized according

**DRAFT**

to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path.

27. The sound system of claim 1 wherein the audio signals are stored on a common recording medium.
28. A system for reproducing separately stored audio signals corresponding to sounds produced by a plurality of sound sources, comprising:
  - means for separately retrieving over separate signal paths the stored audio signals;
  - an amplification network comprising a plurality of amplifier means under common control, with separate amplifier means in the individual signal paths for separately amplifying each of the separate audio signals, each of the amplifier means comprising one or more amplifier elements;
  - a loudspeaker network comprising a plurality of loudspeaker means, with separate loudspeaker means in the individual signal paths for reproducing the separately amplified audio signals; and
  - a dynamic control means for individually controlling each of the amplifier means and individual elements of the amplifier means to enable automatic simultaneous control over the amplifier means.
29. The sound system of claim 28, wherein the sound sources produce sounds having different sonic characteristics and each of said loudspeaker means is customized according to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path.

**DRAFT**

30. The sound system of claim 29 wherein the at least one sonic characteristic comprises the frequency range of the sounds produced by the corresponding sound source.
31. The sound system of claim 29 wherein the at least one sonic characteristic comprises the directivity pattern of the sounds produced by the corresponding sound source.
32. The sound system of claim 29 wherein the at least one sonic characteristic comprises the frequency range and the directivity pattern of the sounds produced by the corresponding sound source.
33. The sound system of claim 29, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements, and customization of the at least one loudspeaker means includes selecting loudspeaker elements based on frequency characteristics of the sounds to be reproduced by that loudspeaker means.
34. The sound system of claim 29, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements, and customization of the at least one loudspeaker means includes arranging loudspeaker elements based on directivity pattern characteristics of the sounds to be reproduced by that loudspeaker means
35. The sound system of claim 29, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements, and customization of the at least one loudspeaker means includes selecting loudspeaker elements based on frequency characteristics of the sounds to be reproduced by that



**DRAFT**

loudspeaker means and arranging loudspeaker elements based on directivity pattern characteristics of the sounds to be reproduced by that loudspeaker means.

36. The sound system of claim 29, wherein at least one of the loudspeaker means comprises a two or more loudspeaker elements and the loudspeaker elements are controlled by the dynamic controller.
37. The sound system of claim 28 further comprising means for selectively enabling a user to elect to intentionally group together audio signals from two or more sound sources for playback over a common signal path.
38. The sound system of claim 28 wherein two or more sound sources may be separately stored but intentionally played back over a common signal path.
39. The sound system of claim 28 wherein the sound sources produce sounds having sonic characteristics and wherein two or more sound sources having similar characteristics may be separately received, converted and stored but intentionally mixed together during playback and passed through a common loudspeaker means.
40. The sound system of claim 28 wherein the sound sources produce sounds have different sonic characteristics and at least of said amplification means is customized according to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path.
41. The sound system of claim 28 wherein the sound sources produce sounds have different sonic characteristics and each of said amplification means is

**DRAFT**

customized according to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path..

42. The sound system of claim 28 wherein each of the amplification means and loudspeaker means are under common control of the dynamic controller.
43. The sound system of claim 28, wherein at least one of the amplifier means comprises more than one amplifier element in a signal path.
44. The sound system of claim 43 wherein the more than one amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means.
45. The sound system of claim 43 wherein the amplifier elements are separately controllable by the dynamic controller.
46. The sound system of claim 28, wherein at least one of the amplifier means, comprises more than one group of amplifier elements.
47. The sound system of claim 46 wherein the groups of amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means.
48. The sound system of claim 46 wherein the groups of amplifier elements are separately controllable by the dynamic controller.
49. The sound system of claim 28, wherein at least one of the amplifier means comprises more than one amplifier element in a signal path, wherein the more than one amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means and the amplifier elements are separately controllable by the dynamic controller.

**DRAFT**

50. The sound system of claim 28, wherein at least one of the amplifier means, comprises more than one group of amplifier elements, the groups of amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means and the groups of amplifier elements are separately controllable by the dynamic controller.
51. The sound system of claim 28, wherein at least one of the amplifier means comprises more than one amplifier element and the dynamic controller controls the amplifier means by selectively turning on or off individual amplifier elements.
52. The sound system of claim 28, wherein at least one of the amplifier means comprises more than one group of amplifier element and the dynamic controller controls the amplifier means by selectively turning on or off individual groups of amplifier elements or individual amplifiers within a group.
53. The sound system of claim 28, wherein at least one of the amplifier means comprises more than one amplifier element in a signal path, wherein the more than one amplifier elements are customized based on characteristics of the audio signals to be amplified by the at least one amplifier means and the amplifier elements are separately controllable by the dynamic controller and wherein the sound sources produce sounds having different sonic characteristics and each of said loudspeaker means is customized according to one or more sonic characteristic of the sounds corresponding to the audio signals on its signal path.

**DRAFT**

54. The sound system of claim 28 wherein the audio signals are stored on a common recording medium.
55. A method of recording and reproducing sound comprising the steps of:  
capturing a plurality of sounds from a plurality of sound sources;  
converting each of the plurality of sounds to an audio signal;  
separately recording each of the audio signals;  
separately retrieving each of the audio signals;  
separately amplifying each of the plurality of audio signals;  
separately supplying each of the audio signals to a loudspeaker system to reproduce the original plurality of sounds; and  
a dynamic control means for individually controlling each of the amplifier means and individual elements of the amplifier means to enable automatic simultaneous control over the amplifier means.
56. A method of reproducing separately stored audio signals corresponding to sounds produced by a plurality of sound sources, the method comprising the steps of:  
separately retrieving each of the audio signals;  
separately amplifying each of the plurality of audio signals;  
separately supplying each of the audio signals to a loudspeaker system to reproduce the original plurality of sounds; and  
a dynamic control means for individually controlling each of the amplifier means and individual elements of the amplifier means to enable automatic simultaneous control over the amplifier means.

**DRAFT**

57. A method of reproducing separately receive audio signals corresponding to sounds produced by a plurality of sound sources, the method comprising the steps of:
- separately amplifying each of the plurality of audio signals;
  - separately supplying each of the audio signals to a loudspeaker system to reproduce the original plurality of sounds; and
  - a dynamic control means for individually controlling each of the amplifier means and individual elements of the amplifier means to enable automatic simultaneous control over the amplifier means.

RES 105622v2